SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

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MSS, intended for publication and books, etc., intended for review should be sent to the responsible editor, Professor J. McKeen Cattell, Garrison-on-Hudson, N. Y. WASHINGTON MEMORIAL INSTITUTION FOR POST-GRADUATE STUDY AND RE-SEARCH IN WASHINGTON.

DURING the past winter and spring there has been in Washington an active movement having for its object the founding of an institution to facilitate the utilization of the various scientific and other resources of the Government for purposes of research. The aim is cooperation with universities, colleges and individuals in rendering available to men and women the practical post-graduate training which cannot be obtained elsewhere in the United States and which is now available in Washington to a limited degree only.

The movement originated in the Washington Academy of Sciences, which appointed a committee to take charge of the matter. This committee consisted of the president of the Academy, Hon. Charles D. Walcott (chairman); Hon. Carroll D. Wright, Commissioner of Labor: Dr. C. Hart Merriam, of the Department of Agriculture, and Mr. Marcus Baker, of the Geological Survey. Communication was at once established with the board of trustees of the George Washington Memorial Association, who appointed a committee to cooperate with the committee of the Washington Academy, consisting of Mrs. Archibald Hopkins, president of the Association, Mrs. Phoebe A. Hearst and Mrs. L. M. D. Sweat.

as a sub-topic, somewhat illogically as it would seem.

Many minor uses of clays, as in cements, paints, paper-filling, road-materials, etc., are next reviewed, and then the various tests of different clay products are described as an aid to the practical worker. An extensive compilation of clay analyses, an excellent bibliography and a directory of clay workers in New York State conclude the bulletin.

The book is encyclopedic in treatment and will prove a valuable work of reference not only within but without the State.

J. F. KEMP.

COLUMBIA UNIVERSITY.

SCIENTIFIC JOURNALS AND ARTICLES.

The first number has been issued of Kirchhoff's Technische Blätter, a weekly periodical not intended for popular reading, but having for its purpose the accurate rendition of scientific and technical matter. The idea of its editor and publisher is to supply these 'leaves' not only to individual subscribers but, and principally, to the subscribers to the newspapers, as supplements to regular issues. By this plan the newspaper is able to offer its readers popular but scientifically correct accounts of current progress and advances in technical departments, written by scientific men of recognized standing and often without appreciable additional expense. The list of already promised contributions includes articles by a large proportion of the leading scientific men of Germany and many in other countries. The first number contains, for example, articles on the Berlin-Cologne electric railway by Arthur Kirchhoff, on metallurgical work by Dr. Wedding, on his flying machine by Hofmann, on the steam-turbine by Professor Kubler, and a variety of other interesting matter, well condensed as also well selected. The enterprise is a novel one and deserves success. One would think that such a plan would prove practicable in the United States, more than in Europe; since many of our newspapers, notably the New York Sun and the Times, have long owed something of their reputation to their interest in, and accuracy of statement regarding, scientific and technical matters. Like the new German periodical, they have secured their information from experts familiar with the subjects discussed and competent not only to present a clear and concise account of a scientific or technical advance, but also to advise regarding the importance of the matter and the advisability of giving it space. Fads and frauds and follies are thus avoided.

R. H. T.

The American Naturalist for May begins with an account of 'Two New Myrmecophilous Genera of Aberrant Phoridæ from Texas,' by Charles T. Bruce, these being wingless Diptera of a family before unknown in America. L. B. Walton discusses 'The Metathoracic Pterygoda of the Hexapoda and their Relation to the Wings,' concluding that the typical thoracic segment possesses the components of both pterygodum and wing, and Vernon L. Kellogg considers 'Phagocytosis in the Postembryonic Development of the Diptera.' H. S. Jennings has a paper 'On the Significance of the Spiral Swimming of Organisms,' considering that by means of this many creatures, even those not symmetrical, are enabled to pursue what in the main is a straight course. The 'Synopses of North American Invertebrates' contains the second part of the Hydromedusæ, by Chas. W. Hargitt. The 'Reviews of Recent Literature' are unusually numerous, occupying nearly 40 pages.

The Plant World for May contains the final part of 'Hints on Herborizing,' by A. H. Curtiss; 'The Asparagus Rust,' by Byron D. Halstead, and many briefer articles, notes on current literature and reviews. In the 'Families of Flowering Plants,' Charles L. Pollard treats a number of families of the Rosales.

The Journal of the Boston Society of Medical Sciences for April 23, contains 'A Contribution to the Normal Histology and Pathology of the Hemolymph Glands,' by A. S. Warthin; a second paper on 'The Relation between Physique and Mental Work,' by Henry G. Beyer, in which additional evidence is adduced to show that, as a rule, physical and mental ability go hand in hand, and an article on 'Typhoid

Choletcytitis with Observations on Gall Stone Formation,' by J. H. Pratt.

The Popular Science Monthly for June opens with a timely article on 'Our Forest Reservations,' by J. W. Toumey, in which the subject is discussed from various points of view. David Starr Jordan presents the second instalment of 'The Blood of the Nation,' showing how the slaughter of the flower of the nation in war contributes to the survival of the unfit, and Robert H. Thurston gives the concluding portion of his paper on 'Progress and Tendency of Mechanical Engineering in the Nineteenth Jas. Lewis Howe discusses 'The Century.' Periodic Law,' and Henry A. Rowland's 'A Plea for Pure Science,' is republished as a tribute to his memory, while Gary N. Calkins treats at some length of 'The Malaria Germ and Allied Forms of Sporozoa.' Francis H. Herrick has a well-illustrated article on 'The Wild Bird at Arm's Length; A New Method of Bird Study,' this consisting in removing the branch to which a nest with young birds is attached to some accessible spot near by a green tent, from which the birds are observed and photographed at a short distance. The final article is the sixth portion of 'A Study of British Genius,' by Havelock Ellis, this being devoted to marriage and family.

Bird-Lore for May-June opens with an article by John Burroughs on 'A Bewildered Phœbe,' followed by 'Bird-Nesting with Burroughs,' by Frank M. Chapman, well illustrated from photographs. Annie Trumbull Slosson contributes 'A Sudden Friendship,' showing how tame wild birds may suddenly become. The fourth series of 'Birds and Seasons' treats of the forms to be observed from Boston to Stockton, Cal., incidentally including the statement that Dr. W. L. Ralph is to continue the 'Life Histories of North American Birds' which was begun by the late Major Bendire. Among the various articles in the different 'departments' is one of special interest entitled 'A Connecticut Game Peserve,' by Willard G. Van Name, which hints at a successful method of increasing the birds by making a reservation where they are protected at all seasons and fed during winter and whence they spread into adjacent territory.

SOCIETIES AND ACADEMIES.

THE NEW YORK SECTION OF THE AMERICAN CHEMICAL SOCIETY.

The regular meeting of the New York Section of the American Chemical Society was held May 10th, at the Chemists' Club, 108 West 55th Street, Dr. C. A. Doremus presiding.

The following papers were read:

'The Quantitative Determination of Cadmium,' by E. H. Miller and R. W. Page.

'On the Relation of Chemical Constitution to the Physiological Action of Certain Modern Anæsthetics,' by W. E. Dreyfus.

'Alloys of Titanium and Titanium Steel ' by A. J. Rossi.

(a) 'Chemical Nature of the Enzymes,' (b) 'Note on Nucleic Acid,' by P. A. Levene, read by Dr. S. Bookman.

'Analysis of Garden Sage, with Notes on the Determination of Essential Oils,' by L. L. Watters.

Each of the papers received some discussion.

A communication was read from the chairman of the New York Section of Chemical Industry, relative to the appointment by that body of a committee to secure 'uniformity in technical analysis'; and stating that a subcommittee had been appointed to investigate the analysis of Portland Cement. Also that work on this line had commenced and that members of the New York Section of the American Chemical Society were invited to cooperate.

It was moved and seconded that the matters be brought before the council with the recommendation that a committee be appointed to cooperate with the committee of the Society of Chemical Industry.

It was also voted that the chairman of the New York Section be returned as a local delegate to the council of the Society, provided he be not already a member of the council as delegate at-large.

DURAND WOODMAN, Secretary.

DISCUSSION AND CORRESPONDENCE. THE MOTION OF A TOP.

The elementary explanations of this motion generally labor under the difficulty which attended the explanations of the late Professor Pliny Earle Chase, that is, they need an ex-